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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------|------------------|
| 10/585,223 | 06/30/2006 | Anatoli Stobbe | STOBBE-17 PCT | 9228 |
| 25889 | 7590 | 04/01/2009 | | |
| COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576 | | | EXAMINER HU, JENNIFER F | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2821 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 04/01/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/585,223 | Applicant(s) STOBBE, ANATOLI | |
| | Examiner JENNIFER F. HU | Art Unit 2821 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment A received January 9, 2009 has been entered into the record.

Response to Arguments

2. Applicant's arguments filed January 9, 2009 have been fully considered but they are not persuasive. Applicant argues that Van Heerden does not teach an antenna connected with the textile material or integrated into it. However, van Heerden clearly discloses "fabric antenna may comprise a plurality of conductive threads interwoven with the fabric of the garment," [0023]. The applicant has argued that the conductive threads "interwoven" with the fabric cannot be interpreted to suggest that that antenna is an "integral" part of an article of clothing. This argument is not persuasive because a conductive thread interwoven into a fabric can be interpreted to be an integral part of the fabric. "Integral" can be interpreted to mean "of, pertaining to, or belonging as a part of a whole." A conductive thread interwoven into a fabric becomes a part of the fabric as a whole. Therefore, the rejections to claims 1, 2, 4, 8, 9 and 12 under 35 U.S.C. 102(b) and the rejections to claims 3, 5, 6, 7, 10, and 11 under 35 U.S.C. 103(a) are not withdrawn.
3. Applicant's arguments regarding claim objections to claims 1 and 2 are persuasive. Claim objections are therefore withdrawn.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4, 8, 9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Heerden et al (US 2003/0160732).

As for claim 1, Heerden et al. teach a textile material that comprises an HF transponder (Figure 2, item 200) that comprises a circuit module (Figure 2, item 30) and an antenna (Figure 2, item 50) linked therewith and set to a working frequency, wherein the antenna is configured as an E field radiator for a working frequency in the UHF or microwave range, and the E field radiator is completely constituted of electrically conductive components of the textile material itself (Although the prior art does not expressly state the frequency range of the transponder, the RF technology described can include frequencies ranging from the Extremely Low Frequency (ELF) to the Extremely High Frequency (EHF). Arranging the antenna to propagate in a specific range is considered to be intended usage which is given minimal patentable weight).

As for claim 2, Heerden et al. teach the textile material according to claim 1 wherein the electrically conductive components of the textile material can comprise electrically conductive printing paste or electrically conductive thread (Fabric antenna 50 may comprise, a flexible conductive material disposed on a fabric surface, a plurality of conductive threads interwoven with the fabric of a garment, or a combination thereof [0023]) constructions that can be processed by machine as part of an industrial production process that is customary with textiles (The method of forming the device is not germane to the issue of patentability of the device itself. Therefore this limitation has not been given patentable weight).

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As for claim 4, Heerden et al. teach the textile material according to claim 2 wherein the electrically conductive thread construction is a metal-coated synthetic thread, a synthetic thread around which a metal wire or a stranded metal wire is wrapped, a synthetic thread with an integrated metal wire or an integrated stranded metal wire, or a graphite thread (An exemplary fabric for use in implementing fabric antenna 50 is a woven nylon plated with a layer of copper, silver, or nickel [0023]).

As for claim 8, Heerden et al. teach the textile material according to claim 2, wherein antenna connections between the circuit module and the radiator can be implemented by means of connections involving crimping, welding, soldering, or gluing with the use of conductive adhesive (Fabric antenna 50 may be coupled to other fabric antenna elements and RF tag 200 using conductive thread, conductive glue, and interfaced conductive layers of material sewn together [0026]).

As for claim 9, Heerden et al. teach the textile material according to claim 8, wherein in the production process of printing, the printing paste itself is the conductive adhesive (As taught above, Heerden et al. teach the conductive glue used to interlace the antenna elements. The method of forming the device is not germane to the issue of patentability of the device itself. Therefore this limitation has not been given patentable weight).

As for claim 12, Heerden et al. teach the textile material according to claim 1, wherein the radiator is designed as a symmetrical dipole (14) (Heerden et al. teach that It should be appreciated by those skilled in the art that fabric antenna 50 may comprise all antennas suitable for RF communication, including but not limited to a dipole, a patch, a folded dipole, and a

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polarizing antenna. Fabric antenna 50 may be in the form of a strip of conductive woven material [0024].) or as an asymmetrical bar (18) with a counterweight (20).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 5, 6, 7, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Heerden et al (US 2003/0160732).

14. As for claim 3, the radiator detailed in the prior art is designed to work at the manufacturers specifications. The combining of electrical conductors interwoven between each other inherently provides capacitances and inductances. The radiator is designed to resonate in a desired frequency given the structure of the device. This design specification is well within the level of ordinary skill of an artisan in the art.

As for claims 5-7, Heerden et al. teach the structural limitations of the claimed subject matter. [0023] details the use of conductive materials as antenna parts. The materials are interwoven with fabric and other conductive materials, which inherently create a multitude of capacitances and inductances. The prior art teaches the structural limitations while the applicant claims the process. The method of forming a device is not germane to the issue of patentability of the device itself. Therefore, the limitations claimed have not been given patentable weight.

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As for claim 11, Heerden et al. teach (Fig. 2 item 30) a housing that encompasses the circuit module and the antenna connections. The housing is then integrated into the textile material. The housing as stated by the prior art solves the problem of improving security against tampering and the invention would work equally as well with a variation of the housing described. Variations in antenna housing are well within the level of ordinary skill of an artisan in the art.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Heerden et al (US 2003/0160732) in view of Rowson et al. (US 6,675,461).

Heerden et al. teach all the limitations of the claim except the adhesive surfaces of the adhesive connections are UV permeable, and the conductive adhesive is UV curable.

Enabling materials to be permeable to UV radiation is notoriously well known in the art, Rowson teaches the commonality of UV curable adhesives in antenna manufacturing. In Rowson et al teaching, a UV curable adhesive is used to secure spacers of a magnetic dipole antenna. It is a suitable choice because it can be cured extremely rapidly (Col. 5, lines 25-29).

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the prior art teachings because of the efficient benefits of using a UV curable adhesive for antenna configuration.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER F. HU whose telephone number is (571) 270-3831. The examiner can normally be reached on Monday-Friday 9:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JENNIFER F HU/
Examiner, Art Unit 2821

/Douglas W Owens/
Supervisory Patent Examiner, Art Unit 2821
March 28, 2009